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Israel

Tomatoes & Products

Annual

2004

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Report Highlights:
Israeli tomato production in CY 2003 totaled 358,000 MT, of which 163,000 MT (46 percent) were consumed fresh, and 171,000 MT (48 percent) were delivered to the processing plants. There is an increased demand for high lycopene tomato varieties (processing and fresh). Tomato production in CY 2004 is estimated at 422,000 MT, of which 240,000 MT (56.9 percent) will be delivered to the processing plants.

Includes PSD Changes: Yes
Includes Trade Matrix: Yes
Annual Report
Tel Aviv [IS1]
[IS]

Executive Summary

The tomato harvest in CY 2003 totaled 358,000 MT, 1.1 percent less than in the previous year.
Out of the total production in CY 2003, 171,000 MT (48 percent) were delivered to the processing plants, 163,000 MT were consumed fresh, 16,000 MT (4.5 percent) were exported, mainly to the EU, while 8,000 MT were removed as surplus.
In addition, 15,000 MT of fresh tomatoes were imported from the Palestinian Authority. In January 2004 the surplus removal system came to an end.
The forecast for production in CY 2004 is for a crop of 422,000 MT, of which 240,000 MT (56.9 percent) will be delivered to processing plants.

Planted area in MY 2003 totaled 3,435 ha, processing tomato varieties accounts for 68%, while the remainder is fresh tomato varieties. In response to increasing demand in Europe for processed organic tomatoes, 100-150 ha of organic tomatoes is planted annually.

The Household expenditure survey for the year 2002 showed that 15.4 percent of the household expenditure for fresh vegetables was spent on fresh tomatoes, and the monthly average household expenditure on fresh table tomatoes totaled $4.99.
The U.S. share of tomato products is expected to increase in CY 2004 due to the fast devaluation of the Euro against the Israeli Shekel.

PSD Table Israel Fresh Tomatoes							
	2002	Revised	2003	Estimate	2004	Forecast	UOM
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	
Market Year Begin		02/2002		02/2003		02/2004	MM/YYYY
Plnt For Fresh Consump	0	1330	0	1345	0	1360	(HA)
Plnt For Processing	0	1760	0	2050	0	3000	(HA)
TOTAL Area Planted	0	3090	0	3395	0	4360	(HA)
Harv. For Fresh Cons.	0	1300	0	1320	0	1320	(HA)
Harv. For Processing	0	1650	0	2000	0	2950	(HA)
TOTAL Area Harvested	0	2950	0	3320	0	4270	(HA)
Fresh Production	0	202	0	187	0	182	(MT)
Processing Production	0	160	0	171	0	240	(MT)
TOTAL Production	0	362	0	358	0	422	(MT)
Supply from the PA	0	20	0	15	0	15	(MT)
Total Supply	0	382	0	373	0	437	(MT)

Fresh Table Tomatoes

Production

Production of tomatoes in CY 2003 totaled 358 tmt, of which 163 tmt (45.5 percent) were consumed fresh, 16 tmt (4.5 percent) were exported, 8 tmt were removed as surplus, and the rest were delivered to the processing industry. Production of fresh tomatoes in CY 2003 totaled 178 thousand metric tons (tmt).
The forecast for CY 2004 is for a total local crop of 422 tmt of which 165 tmt (39.1 percent) are for the local fresh market, 17 tmt (4.0 percent) will be exported and 240 tmt (56.9 percent) will be delivered to processing plants.

Table 1: Tomatoes Disposition, Thousands Tons, Net Weight, Total Production[1]

CY		1997	1998	1999	2000	2001	2002	2003	2004*
Total Exports	Quantity	11	13	14	19	18	16	16	17
	Percent	3.1%	2.9%	2.8%	4.6%	5.5%	4.4%	4.5%	4.0%
Delivery to Processors	Quantity	176	267	307	223	139	160	171	240
	Percent	49.7%	60.1%	62.4%	53.6%	42.6%	44.2%	47.8%	56.9%
Local Fresh Market	Quantity	153	150	149	152	158	163	163	165
	Percent	43.2%	33.8%	30.3%	36.3%	48.5%	45.0%	45.5%	39.1%
Surplus Removal System	Quantity	14	14	22	23	11	23	8	0
	Percent	4.0%	3.2%	4.5%	5.5%	3.4%	6.4%	2.2%	0.0%
Total	Quantity	354	444	492	417	326	362	358	422
	Percent	100%	100%	100%	100%	100%	100%	100%	100%

Source: Vegetable Board of Israel, Annual Report 2002, and Primary Report 2003.
*Forecast: Based on information collected from the Vegetable Marketing Board of Israel.

Table 2: Import From the Palestinian and Export to the Palestinian, Tons

CY		Total Fresh Vegetables	Fresh Tomatoes	Tomatoes as a Percentage of Total Vegetables Quantity
2004[2]	Import	20,295	4,490	22.12
2003	Export	N/A	N/A	N/A
	Import	79,000	15,000	18.98
	Gap	N/A	N/A	N/A
2002	Export	13,500	70	0.005
	Import	82,400	19,963	24.62
	Gap	68,900	19,893	28.87
2001	Export	22,000	19	0.0008
	Import	89,100	30,300	34.00
	Gap	67,100	30,281	45.13

Source: Vegetable Board of Israel

Table 3: Tomatoes Disposition, by Destination, $ Millions, Nominal Terms, CY 2002

Kind	Local Market		Export		Delivery to Processors		Inter-Mediate Produce	
	Value	Percent	Value	Percent	Value	Percent	Value	Percent
All Tomato Kinds	86.58	71.1%	23.75	19.5%	10.63	8.7%	0.85	0.7%
Of Which: Fresh Table Tomatoes	86.58	77.9%	23.75	21.4%	0.00	0.0%	0.85	0.7%
Of Which: Cherries	8.02	28.8%	19.86	71.2%	0.00	0.0%	0.00	0.0%
Industrial Varieties	0.00	0.0%	0.00	0.0%	10.63	100.0%	0.00	0.0%

Source: Ministry of Agriculture and Rural Development, 2002 Annual Report.

[1] Total production+ Imports from the PA= Total Supply
[2] 2004- Till March 31

Planted Area

The planted area for fresh table tomatoes in MY 2003 totaled 1,345 ha of which 1,295 ha (96.3 percent) were planted in greenhouses and under net covers. The forecast for crop year 2004 is for an increase of 15-20 ha in total planted area, of which most will be in open fields. The increase in open field planted area is now possible as result of the development of local new varieties that are resistant to the Tomato Yellow Leaf Curl Virus (TYLCV).
The advantages of greenhouse and net-covers are: better control on the production condition, reduction in pesticides use, weather problems protection, efficiency in water usage. Most of the fresh tomatoes planted area is concentrated in the southern parts of the country (Bsor area).

Table 4: Planted Area by Cultivation Method, for Export and Local Market, MY 2003[3]

Cultivation Method	Hectare	Percent
Open Fields	50	3.70
Greenhouses+ Net Covers	1,295	96.30
Total	1,345	100.00

Source: Vegetable Board of Israel, Annual Report.

Table 5: Planted Area in Greenhouses & Net-Covers, by Region, Ha, MY 2003

Region	Regular and Cluster Tomatoes		Cherry Tomatoes	Total	Percent of Total Planted Area
	Greenhouses	Net-Covers			
Northern Region	55	0	0	55	4.25
Interior Valleys	38	0	5	43	3.32
Central Region	170	15	0	185	14.29
Southern Region	555	250	207	1,012	78.14
Total	**818**	**265**	**212**	**1,295**	**100.00**

Source: Department of Vegetables, Ministry of Agriculture and Rural Development

Growers

The total planted area is owned by approximately 1,000 growers, of which 159 grew more than 200 tons per orchard. Those growers produced 52 percent of total tomato production in Israel.

Organic Tomatoes

Out of the total Greenhouses and Net-Covers area in MY 2002, 69 hectares were grown organically. Organic tomatoes export in MY 2002, totaled 3,400 tons, of which 1,400 (41.2 percent) tons were cherry tomatoes and 2,000 tons were other varieties. Out of the total organic vegetables export in MY 2002, 17 percent were tomatoes.

R&D

There are efforts to develop cherry varieties for open field planting in order to reduce production cost. This is due to a decrease in cherry prices in European markets. There are also efforts to develop the cherry mini plum with a color range of yellow, orange and red. In addition, researchers are trying to develop tomatoes with a higher level of lycopene.

[3] MY 2003, September 2002 till August 2003.

Production Policy

In January 2004 the surplus removal system came to an end. In CY 2003 the tomato surplus totaled 8 tmt, 15 tmt less than CY 2002 (-65.21 percent), and represented 66.7 percent of total vegetables surplus removal. During the period of June-August 2003 there was not any government assistance with surplus removal, although they promised the growers to help them with the surplus removal. Due to facts mentioned above, the supply in the summer was bigger than local demand, and the wholesale price decreased by 48 percent to $0.266 per kg. Total damage to the tomato growers was estimated at $8.33 million. Growers are demanding compensation from the government.

Fresh Tomato Production Value Compared to Other Agriculture Sectors

Total production value in CY 2002 for all tomato kinds, decreased by 8.96 percent compared to CY 2001 (from $133.82 million to $121.82 million, in real terms). In addition, total production value for cherries decreased by 35.51 percent compared to CY 2001 (from $43.28 million to $27.91 million). The decrease in tomatoes' value in CY 2002 was a result of an increase in tomato surplus quantity compared to CY 2001 (from 11 tmt to 23 tmt). In addition, the average retailer tomato price decreased by 1.9 percent in CY 2002 compared to CY 2001 (see table 8).

Table 6: Agriculture and Fresh Tomatoes Production Value, CY, $ Millions- Real Terms (2002=100.0)

Agricultural Value	2000	2001	2002
Of Which: Vegetables Total	621.46	734.67	721.30
Of Which: Tomatoes of All Kinds	94.07	133.82	121.82
Of which: Fresh Table Tomatoes	80.25	123.57	111.19
Of Which: Cherries	14.02	43.28	27.91
Fresh Table Tomatoes as Percentage of Total Vegetable Value	12.91	16.82	15.41
Cherry Tomatoes as Percentage of Total Fresh Table Tomatoes	17.47	35.02	25.10

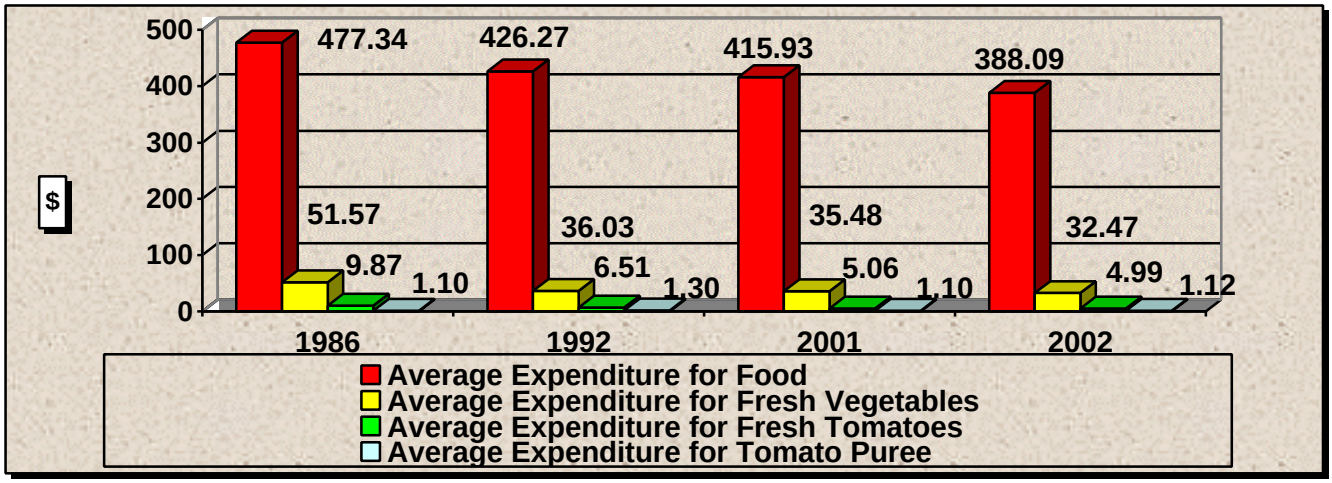
Source: Ministry of Agriculture and Rural Development, 2002 Annual Report.

Marketing

Consumption and Household Expenditure on Fresh Tomatoes

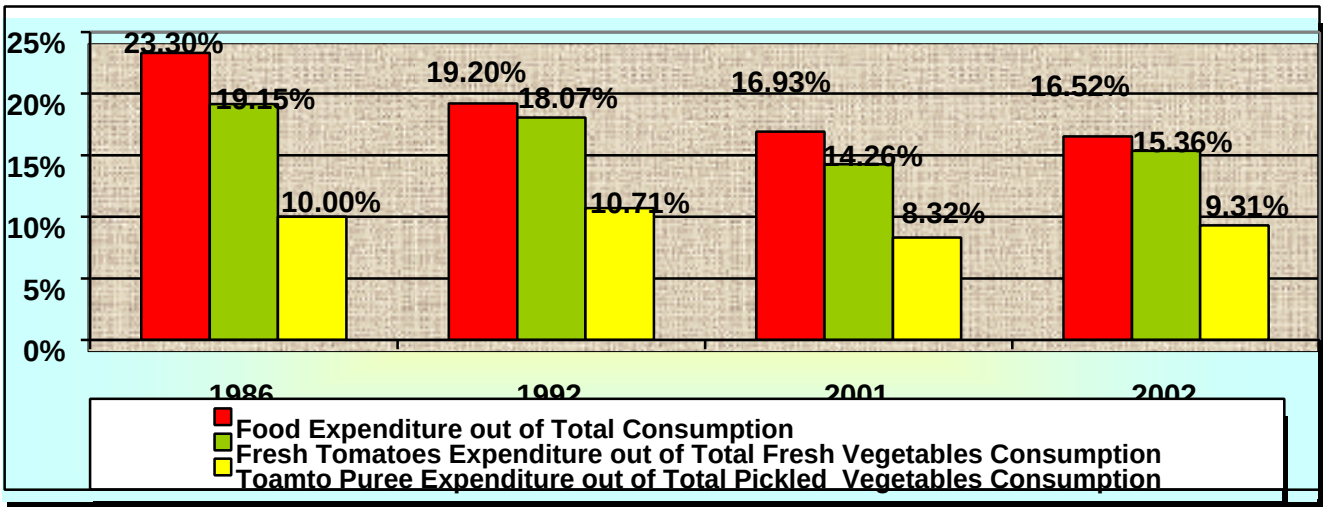
Consumption in CY 2003 totaled 178 tmt, of which 163 tmt (91.6 percent) were Israeli tomatoes and 15 tmt were imported from the Palestinian Authority. The local consumption of fresh table tomatoes in CY 2003 totaled 27.38 kg per capita, 10.87 percent higher than in the previous year.
According to the Household Expenditure Survey for 2002, the monthly average expenditure for fresh tomatoes totaled $4.99. From 1986 to 2002, the monthly average household expenditure for fresh tomatoes decreased by 49.4 percent (from $9.87 to $4.99). The fresh tomatoes share of the average household expenditure for fresh vegetables decreased from 19.1 percent in 1986 to 15.3 percent 16 years later.

Chart 1: Monthly Average Household expenditure[4] on food, Fresh Vegetables[5], Fresh Tomatoes and Tomato Puree CY, Real Terms (October 2002=100)



Source: Household Expenditure Survey, Different Years, CBI.

Chart 2: Annual Average Household Expenditure in Israel, CY, Percent



Source: Household Expenditure Survey, Different Years, CBI.

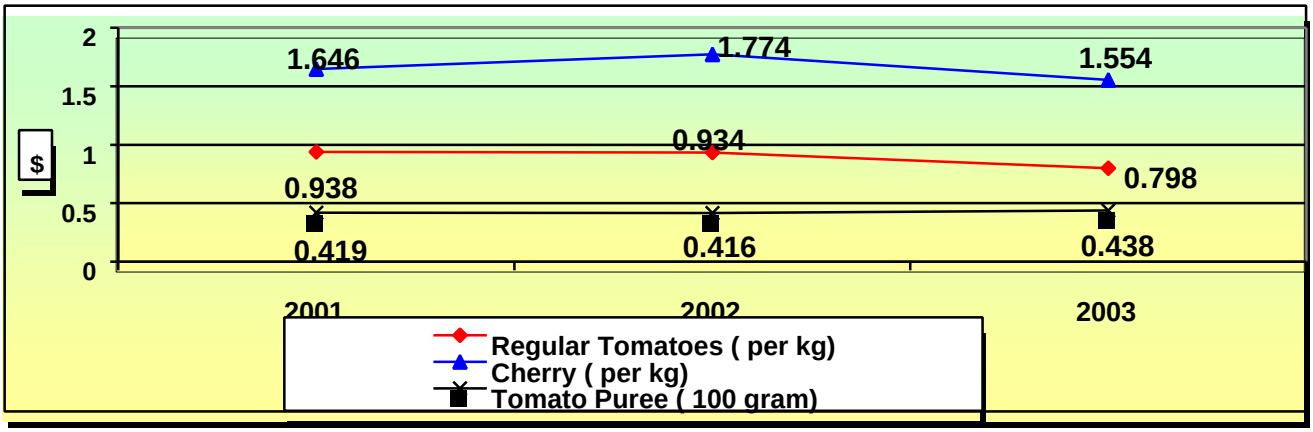
[4] Exchange Rate, 1 USA Dollar=4.45 New Israeli Shekel.
[5] Including Potatoes and Sweet Potatoes.

Table 7: Annual Local Consumption Per Capita, Tomatoes and Vegetables, Kg

CY	Vegetables	Vegetables, Percent Change Compared to Previous Year	Tomatoes	Tomatoes, Percent Change Compared to Previous Year	Tomatoes as Percentage of Total Vegetables Consumption
1997	191.0	1.05%	26.2	6.50%	13.71%
1998	189.0	-1.05%	25.2	-3.81%	13.33%
1999	187.0	-1.05%	24.3	-3.57%	13.00%
2000	183.0	-2.14%	24.1	-0.08%	13.17%
2001	179.0	-2.18%	24.5	0.04%	13.69%
2002	181.0	1.11%	24.7	0.08%	13.65%
Average	**185.0**		**24.8**		**13.42%**

Source: Vegetable Board of Israel, Annual Report 2002

Chart 3: Annual Average Retailer Price, Fresh Tomatoes, and Tomato Puree, Nominal Terms, $, CY



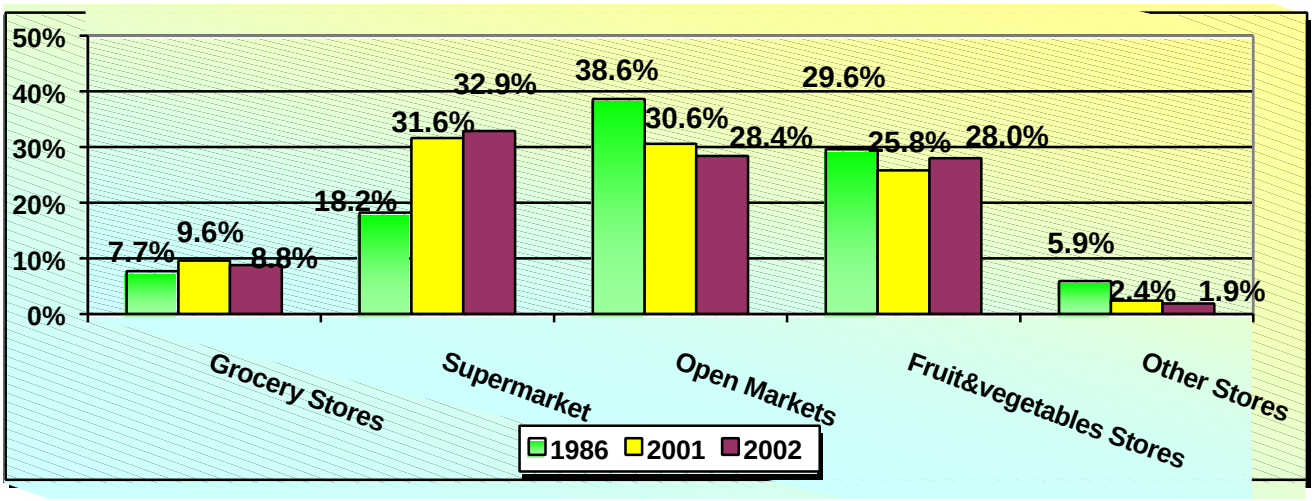
Source: Price Statistic Monthly, Different Years, CBI.

Table 8: Fresh Tomatoes, Arbitration Difference in the Local Market, $ Per Kg, Real Terms, Percent, CY

CY	Average Wholesaler Price	Average Retailer Price	Arbitration Difference, $	Arbitration Difference, Percent
1997	0.449	0.901	0.452	100.06
1998	0.633	1.000	0.367	57.98
1999	0.456	0.840	0.384	84.21
2000	0.418	0.865	0.447	100.69
2001	0.499	0.957	0.458	91.78
2002	0.501	0.939	0.438	87.42
Average of 6 Years	**0.493**	**0.917**	**0.424**	**87.023**

Source: Vegetable Board of Israel, 2002 Annual Report

Chart 4: Household Purchase by Outlet, % of Total Fresh Vegetables Expenditure



Source: Household Expenditure Survey, Different Years, CBI

Trade

Up to the time of the report, (mid April 2004) fresh tomato export totaled 14.0 tmt in MY 2004, of which 9.0 tmt (60 percent) were cherry tomatoes and 5.0 tmt were cluster tomatoes. Fresh tomato exports totaled 18.3 tmt in MY 2003 (September 2002 to August 2003), of which 64.2 percent (11.7 tmt) were cherries. Western Europe is still the major market for Israeli fresh tomatoes. The U.S. share for Israeli fresh tomatoes in CY 2002 increased by 1.1 percent compared to the previous year (from 11.34 percent to 11.47 percent). There are two kinds of cherry tomatoes, open-fields' and Greenhouses' cherries. The Greenhouse cherry tomato is exported primarily to U.K., while the open fields cherry tomato is exported mainly to other European countries. There is a growing demand for tomatoes in clusters, either cherry or regular tomatoes. The Europeans demand EUROGAP certificate for fresh tomatoes exported to the EU, and the Ecofresh certificate for organic products. Those two certificates approve using certain dictated growing protocol.

Table 9: Export of Fresh Tomatoes, MY (September till August), Tons

Variety	2000/1	2001/2	2002/3	2003/4- Till Mid April 2004	2002/3 Percent Change Compared to 2001/2
Cluster Tomatoes and Regular Tomatoes	6,300	6,393	6,545	5,000	2.38
Cherry Tomatoes	9,969	9,990	11,756	9,000	17.68
Total	**16,269**	**16,383**	**18,301**	**14,000**	**11.71**

Source: Department of Vegetables, Ministry of Agriculture and Rural Development

Table 10: Exports of Israeli Fresh and Chilled Tomatoes, by Destination, CY

	Value ($ Thousands)				% of Total export			
Destination	**1997**	**1999**	**2001**	**2002**	**1997**	**1999**	**2001**	**2002**
France	822	1,094	492	477	3.43	4.82	1.70	1.71
Belgium	348	490	166	292	1.45	2.16	0.57	1.05
Netherlands	4,223	5,980	7,288	7,212	17.64	26.33	25.16	25.92
Austria	1,056	1,549	1,417	1,405	4.41	6.82	4.89	5.05
Germany	2,005	2,239	3,452	3,071	8.38	9.86	11.91	11.04
Sweden	551	673	543	619	2.30	2.96	1.87	2.23
Denmark	633	520	105	148	2.64	2.29	0.36	0.53
Finland	336	369	477	490	1.40	1.62	1.65	1.76
U.K.	8,291	6,483	10,601	8,988	34.64	28.55	36.59	32.31
Greece	20	27	56	385	0.08	0.12	0.19	1.38
Italy	62	1	38	37	0.26	0.00	0.13	0.13
Luxemburg	55	0	0	0	0.23	0.00	0.00	0.00
Total EU	**18,402**	**19,425**	**24,635**	**23,124**	**76.88**	**85.54**	**85.03**	**83.12**
Norway	77	123	639	710	0.32	0.54	2.21	2.55
Switzerland	478	410	338	482	2.00	1.81	1.17	1.73
Total West Europe	**18,880**	**19,958**	**25,612**	**24,316**	**78.87**	**87.89**	**88.40**	**87.41**
Russia	291	7	20	162	1.22	0.03	0.07	0.58
Other East Europe	3	45	14	7	0.01	0.20	0.05	0.03
Total East Europe	**294**	**52**	**34**	**169**	**1.23**	**0.23**	**0.12**	**0.61**
Total Europe	**19,174**	**20,010**	**25,646**	**24,485**	**80.10**	**88.11**	**88.52**	**88.02**
U.S.	4,673	2,553	3,286	3,191	19.52	11.24	11.34	11.47
Canada	50	126	35	117	0.21	0.55	0.12	0.42
Asia	34	20	2	25	0.14	0.09	0.01	0.09
Others	6	0	3	1	0.03	0.00	0.01	0.00
Total Out of Europe	**4,763**	**2,699**	**3,326**	**3,334**	**19.90**	**11.89**	**11.48**	**11.98**
Grand Total	**23,937**	**22,709**	**28,972**	**27,819**	**100.0**	**100.0**	**100.0**	**100.0**

Source: CBI, Foreign Trade Statistics, Different Years.

Table 11: Imports of Fresh and Chilled Tomatoes, by Origin, CY, $ Thousands

Value ($ Thousands)				
Origin	**1999**	**2000**	**2001**	**2002**
Turkey	0	0	0	469
Cyprus	0	13	0	0
Jordan	69	79	139	267
Grand Total	**69**	**92**	**139**	**736**

Source: CBI, Foreign Trade Statistics, Different Years.

Processing Tomatoes

Production

Production in CY 2003 totaled 171 (net weight) thousand metric tons (tmt), 13 tmt higher than CY 2002 (8.23 percent). The production volume is determined by international prices for tomato products. The local market has the potential consumption of 120,000 tons of processed tomatoes and the rest is exported. In the pre-season negotiation between the growers' representatives and the processors, the factories signed contracts for delivery of 203,350 tons (gross) in crop year 2003. However, production conditions during crop year 2003 were unfavorable for tomatoes, during the planting period. Heavy rains delayed the plantings that resulted in low quality and reduced yield. Moreover, some of the planting work was done without any machinery, which extended production cost. Brief heat waves during May 2003 caused blossom problems. All these production problems reduced total deliveries from the expected 203,350 tons to 182,789 (gross weight) tons (-10.1 percent) (see table 13). The delayed planting caused a substantial amount of waste in crop year 2003, and net weight totaled 170,984 tons (-6.46% waste).
Average yield in CY 2003 totaled 90 tons per hectare, 10 tons less than in the previous year. The forecast for production in CY 2004 can be expected to reach 235-245 tmt. The increase in production is explained by a shortage in processing tomato products worldwide.

Table 12: Delivery to the Processing plants, Thousands Tons, Net Wight, CY

CY	Total Production	Percent Change Compared to Previous Year
1990	350	
1991	160	-54.28
1992	143	-10.06
1993	205	-43.33
1994	254	23.90
1995	315	24.01
1996	300	-4.76
1997	176	-41.33
1998	267	51.70
1999	307	14.98
2000	223	-27.36
2001	139	-37.67
2002	158	13.67
2003	171	8.23
2004*	240	40.35
Average of 14 CY 1990-2003	226	

Source: Vegetable Marketing Board of Israel.
*Forecast: Based on information collected from the Vegetable Marketing Board of Israel.

Table 13: Planning and Execution, Net and Gross Weight, Tons, by Plants

CY 2003	Pri Nir	T'zam	Miloz	Gan Shamuel	ZanLa'col	Total
Planning	29,800	59,300	45,350	58,100	10,800	**203,350**
Execution (Gross)	24,585	52,220	41,477	53,203	11,032	**182,789**
Execution (Net)	23,676	48,287	38,548	50,014	10,459	**170,984**
Difference between planned crop and actually produced (Gross)	-17.5	-11.9	-8.5	-8.4	2.1	**-10.1**
Percent Change Between Gross and Net Execution (Waste)	-3.8	-7.5	-7.1	-6.0	-5.2	**-6.4**

Source: Vegetable Board of Israel, Annual Report 2003.

Table 14: Waste as Percentage of Total Quantity, by Parameters, CY

CY	1998	1999	2000	2001	2002	2003	2003 Percent Change Compare to 2002
Green	1.88	1.47	1.34	1.74	1.65	2.62	0.97
Mold	0.14	0.33	0.17	0.40	0.21	0.67	0.46
Moth	0.00	0.00	0.00	0.02	0.00	0.01	0.01
Washing Waste	0.00	0.00	0.00	0.06	0.09	0.00	-0.09
Heat Stroke	0.05	0.05	0.30	0.21	0.12	0.03	-0.09
Limited Use	1.19	1.87	1.86	1.07	0.80	1.08	0.28
Added Soil and Objects	2.05	2.05	1.54	1.28	1.84	2.11	0.27
Others	0.39	0.47	0.39	0.49	0.60	0.38	-0.22
Total	**5.22**	**5.23**	**5.05**	**4.42**	**4.76**	**6.46**	**1.70**

Source: Vegetable Board of Israel, Annual Report 2003.

Planted Area

The planted area in crop year 2003 totaled 2,000 ha, 33 percent lower than pre-seasonal plans. It was a result of the low demand for tomato products in international markets. Post estimates that total planted area in crop year 2004 will total 3,000 hectares. The increased planted area is due to a shortage in tomato products. As a result of growing demand for organic products in Europe, 100-150 ha (4.2 percent of the total area) will be planted for organic tomatoes.

All tomato planted areas are in the northern parts of the country (see table 15).

The planting in the Eastern Valleys (Beit S'hean) began on February 5, 2004 and ended in the north in late March.

Processing tomatoes are grown mostly in cooperative agriculture settlements (Kibbutz and Moshav). Due to the lack of employees, mechanization is very intensive: about 98 percent of the tomatoes are machine planted and harvested.

The average tomato's production units are 10 ha and higher.

Table 15: Planted Area by Region, Tomatoes for Industrial, MY 2003, Hectare

Region	Hectare	Percent
Western Galilee	400	20
Western Valley	500	25
Golan Heights and Upper Galilee	400	20
Eastern Valleys	700	35
Total	2,000	100

Source: Central Bureau of Statistics- Israel, Different Years.

Irrigation

Various types of drip-sprinkler irrigate all the tomato orchards in Israel. Recycled water, which is commonly used for irrigation, is not used for vegetables in general and processing tomatoes particularly. Annual tomato water consumption in the coastal plain stands on 3,000 m^3/ha. In the Eastern valleys it is around 7,000 m^3/ha. The average annual tomato water consumption in Israel is approximately 5,500 m^3/ha.

Organic Tomatoes for Processing Plants

In CY 2003 between 5-10 ha were grown organically. In response to increasing demand in Europe for organic tomato products there is an increase in organic plantings for CY 2004. Out of the total area, approximately 100-150 (4.2 percent) will be grown organically. The price gap between the organic and the regular tomatoes is small, however, the production costs of organic tomatoes are higher than those of the regular produce. Forecast for production in CY 2004 is 12,000-14,000 tons.

Grower Prices

The basic price for growers in CY 2003 was set at $65.17/mt for brix of 4.9-5.0. This is $4.496 (7.40 percent) higher than in CY 2002. The maximum brix level for payment was 5.6 and there is no minimum brix level. The average brix level in CY 2003 was 4.92, 0.03 lower than in CY 2002. A premium/fine system is part of the payment system. The average premium for brix was $1.348 per ton for each percent above 5.0. Brix level less than 4.9 percent is due to a fine. The basic brix level in MY 2004 will be 4.8-5.0, while the maximum brix will stand at 5.6. In order to extend the harvest season in MY 2004, premium will be paid to deliveries at the beginning and at the end of the harvest season.
The profitability of the processed tomato growers is good compared to other agricultural sectors. The normative financial estimate shows a 19 percent profit (see table 16).

Table 16: Financial Estimate for Processed Tomatoes, 10 Tons Yield, 0.1 Ha

Operating costs			Profits, $
			651.68
	$	Percent	
Area Preparation	62.02	11.3	
Tomatoes seedlings	62.92	11.5	
Compost	33.03	6.0	
Pesticide	73.26	13.4	
Irrigate	134.83	24.6	
Work	22.28	4.1	
Machinery Harvest	146.07	26.7	
Other	13.03	2.4	
Sum	547.44	100.0	651.68
Total Revenue	**$104.24**		

Source: the Agricultural Extension Service, Ministry of Agriculture and Rural Development.

Varieties

The most popular variety is the high rate lycopene LRT with 15 percent of the total harvest. Post estimates that in the future the total planted area with high lycopene varieties will expand. A premium is paid to high lycopene varieties. In addition, the brigade variety share will also increase in CY 2004.
In response to new demand in Italy for processed and peeled cherry varieties, there are plantings of those varieties. Israel is the first country in the world that grows cherry for the tomato industry.
The estimates for CY 2004 are only for the main varieties. (see table 17)

Table 17: Varieties Share Out of Total Production for Industry- Percent, CY

Varieties	2000	2001	2002	2003	2004*
Other	13.29	10.30	12.82	17.00	20.00
5811	14.30	16.00	19.70	12.96	15.00
La Rosa	0.51	0.60	---	----	---
H- 8892	5.40	3.90	0.88	6.54	10.00
6109	6.20	0.80	0.88	6.09	N/A
LRT – 89	16.50	13.90	9.40	6.01	N/A
LRT - 3502	---	---	1.80	5.61	N/A
LRT – 3518	---	---	---	1.75	N/A
LRT – 915	---	6.90	4.30	1.43	N/A
LRT	---	---	---	0.75	N/A
Total LRT	16.50	20.80	15.50	15.55	15.00
Brigade	19.60	8.80	12.50	10.87	15.00
AB – 8	---	---	---	4.21	10.00
3155	7.70	7.70	4.70	4.02	N/A
APTX – 390	3.00	9.80	9.40	3.32	5.00
APTX – 271	3.40	7.00	---	0.41	N/A
951	6.20	9.00	12.10	3.05	N/A
4303	---	---	---	2.67	N/A
1048	---	---	2.40	1.75	N/A
H – 9053	---	---	---	2.79	N/A
H – 9382	---	---	1.40	1.03	5.00
H – 9176	3.90	5.30	7.30	2.58	N/A
H – 9557	---	---	---	2.22	N/A
HA – 3303	---	---	---	0.26	5.00
Cherry- 9501	---	---	0.42	1.02	N/A
Cherry - 4938	---	---	---	0.05	N/A
Total	100.00	100.00	100.00	100.00	100.00

*Forecast: Based on information collected from the Agricultural Extension Service, Ministry of Agriculture and Rural Development.

Processing Plants

Five processing plants are active out of 13 that existed ten years ago. Their full capacity stands at 250 tmt. In recent years they have been operating at 55-68 percent capacity only. That's the reason for relatively short processing season (3 months compared to 4 months in the past).

Table 18: Delivery to Processing plants, by Weeks, 2003, Tons (Gross), Percent

Period	Tons	Percent	Cumulative Percent
6/15-6/21	741	0.41	0.41
6/22-6/28	6,489	3.55	3.96
6/29-7/5	11,330	6.20	10.16
7/6-7/12	15,252	8.34	18.5
7/13-7/19	18,880	10.33	28.83
7/20-7/26	21,470	11.75	40.58
7/27-8/2	19,733	10.80	51.38
8/3-8/9	20,061	10.97	62.35
8/10-8/16	16,333	8.94	71.29
8/17-8/23	14,286	7.82	79.11
8/24-8/30	14,787	8.09	87.20
8/31-9/6	11,638	6.37	93.57
9/7-9/13	8,005	4.38	97.95
9/14-9/20	3,235	1.77	99.70
9/21-9/27	549	0.30	100.00
Total	**182,789**	**100.00**	

Source: Vegetable Board of Israel, Annual Report 2003.

Processed Tomatoes Production Value Compared to Other Agriculture Sectors

Total production value in CY 2002 was 3.7 percent higher than that in CY 2001 (from $10.25 million to $10.63 million in real terms). Processed tomatoes' share, out of the total tomato value, has increased by 13.8 percent compared to the previous year.
Production value of processed tomatoes in CY 2001 totaled $10.25 million and represented 1.39 percent of total vegetables production value. In CY 2002 the production value increased to $10.63 million and represented 1.47 percent of the total vegetables production value in that year (see table 19).

Table 19: Agriculture and Processing Tomatoes Production Value, CY, $ Millions- Real Terms (2002=100.0)

Agricultural Value	2000	2001	2002
Total Value for the Vegetables Sector	621.46	734.67	721.30
Of Which: All Tomato Kinds	94.07	133.82	121.82
Of Which: Tomatoes For Industrial Varieties	13.82	10.25	10.63
Industrial Varieties as Percentage of Total Vegetable Value	2.22	1.39	1.47
Industrial Varieties as Percentage of All Kinds of Tomatoes Value	14.69	7.66	8.72

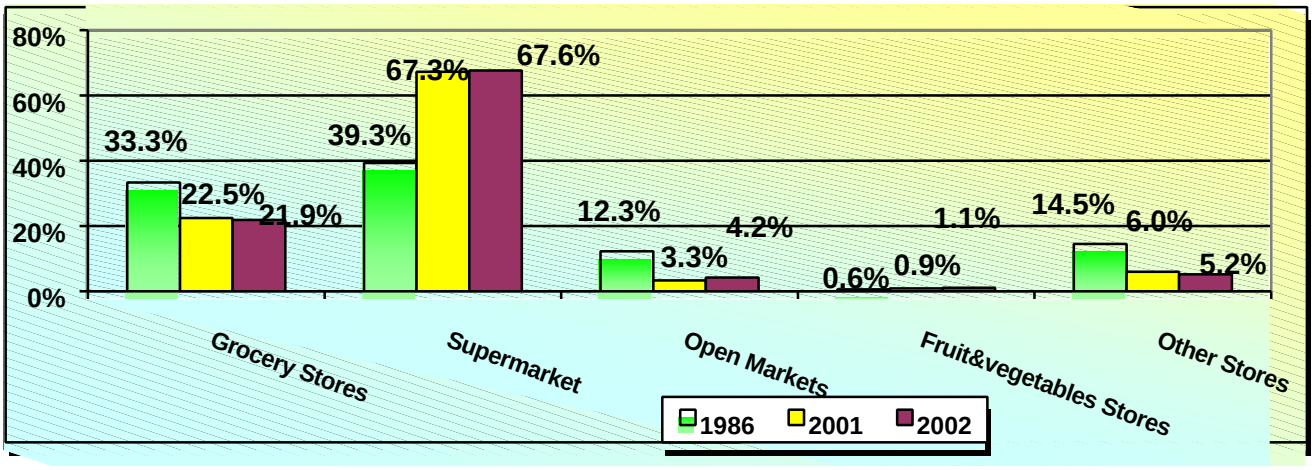
Source: Ministry of Agriculture and Rural Development, Annual Reports.

Local Consumption

Tomato products consumption is increasing in recent years, mainly due to the consumption of peeled tomatoes.

According to the Household Expenditure Survey from 2002, the monthly average expenditure for tomato puree totaled $1.12. During CY 2002, the monthly average household expenditure for tomato puree increased by 1.82 percent (from $1.10 to $1.12). Tomato puree's share out of the average household expenditure for pickled vegetables decreased from 10 percent in 1986 to 9.31 percent 16 years later. In 2002 tomato puree's share out of the average household expenditure for pickled vegetables increased from 8.32 percent in 2001 to 9.31 percent (see charts 1,2).
In CY 2003 the average price for tomato puree increased by 5.3 percent compared to the previous year (from $0.416 to $0.438 per 100 gram). (see chart 4)

Chart 5: Frozen and Canned Vegetables, Household Purchase by Outlet Type, % of Total Non-Fresh Vegetables Expenditure



Source: Household Expenditure Survey, Different Years, CBI

Trade

Tomato product exports have decreased by 14.86 percent: from 8,973 tons in CY 2002 to 7,639 tons in CY 2003 (January thru August). Revenues have decreased by 8.56 percent: from 8,022 thousand of dollars in CY 2002 to 7,334 thousand of dollars in CY 2003 (January thru August). As a result of the facts mentioned above, the price per ton increased by 14.28 percent: from $840 in CY 2002 to $960 in
CY 2003 (average for all product type), however, for the conventional products (sauce, peeled, concentrate and juice), the price per ton increased by 1.37 percent: from $508 in CY 2002 to $515 in CY 2003.
The price per ton increased due to the favorable exchange rate of the Euro against the Israeli shekel. The U.S. and the EU are still the main markets for Israeli tomato products
(79 percent of total exports). Forty six to fifty percent of the Israeli tomato products are exported to the U.S. In addition, the market in East-Europe is increasing. The concentrate and peeled tomato products are still the main products for the Israeli export (72-74 percent of total export).
The plant "Likored" produces an ingredient for the vitamins, herbs, mineral and drug industries. The ingredient is called lorizin, and the brand's name is Lyc-o-Mato. Production was 3,000, 2,350, 2,500 tons in CY 2001, 2002, 2003, respectively. The average price per ton of the product is $50,000, and it is exported to industrialized countries.
The value of the U.S. market share for imported tomato products in CY 2002 dropped by 6 percent compared to the previous year, from 76.3 percent to 71.7 percent. The decreased value of U.S. market share was a result of increased imports from Turkey, East-Europe and the EU

Total tomato products imports value in CY 2002 is 20.8 percent lower than in CY 2001: While whole or in pieces tomatoes have decreased by 81.6 percent, ketchup and other tomato sauces imported dropped by 11.7 percent, compared to CY 2001.
Recently "Pri Nir" factory signed an export agreement with "SENA" (U.S. firm) for an export of the new and healthier Ketchup to the U.S. The value of the trade is approximately $778 thousand and the delivery will be in the forthcoming weeks.
The U.S. share of tomato products is expected to increase in CY 2004, due to the fast devaluation of the Euro against the Israeli Shekel.

Table 20: Total Exports of Tomatoes Products, Tons (in Terms of Final Product), $ Thousands, $ Per Ton, CY

CY	Tons	Revenue	Average Price Per Ton, For All Products Kinds (Conventional & Unconventional[6])	Average Price Per Ton, Just For Conventional[7] Products	Percent Change Between All Products Kinds and Conventional Products
1995	53,641	33,992	634	633	0.16
1996	35,230	24,296	690	689	0.15
1997	29,025	20,164	695	695	0.00
1998	34,353	22,511	718	718	0.00
1999	21,086	14,754	700	699	0.14
2000	9,707	7,243	746	746	0.00
2001	12,988	11,833	911	528	72.54
2002	17,794	12,431	840	508	65.35
Till 8.2002	8,973	8,022	894	513	74.27
Till 8.2003	7,639	7,334	960	515	86.41
Average	**24,607**	**18,403**	**766**	**637**	20.25

** It is likely, that until CY 2001 the non-conventional products were included with the conventional products' statistics.

[6] Unconventional Products: Ingredient for the vitamins, herbs, mineral and drug industries.
[7] Conventional Products: Sauce, Concentrate, Juice and Peeled.

Table 21: Total Exports of Tomatoes Products, by Type, Tons (in Terms of Final Product), Value

		Sauce	Peeled	Concentrate	Juice	Other	Total
2001	Tons	646	6,016	3,363	614	2,349	12,988
	Revenue, Thousand $	386	2,696	2,184	354	6,213	11,833
	$ Per Ton	**597**	**448**	**649**	**576**	**2,644**	**746**[8]
2002	Tons	463	5,766	4,075	578	3,912	14,794
	Revenue, Thousand $	270	2,428	2,574	254	6,905	12,431
	$ Per Ton	**583**	**421**	**631**	**439**	**1,765**	**911**
Till 8/2002	Tons	353	3,788	2,824	406	1,601	8,973
	Revenue, Thousand $	213	1,643	1,764	166	4,236	8,022
	$ Per Ton	**603**	**433**	**624**	**408**	**2,702**	**840**
Till 8/2003	Tons	218	2,982	2,543	324	1,572	7,639
	Revenue, Thousand $	133	1,377	1,412	205	4,207	7,334
	$ Per Ton	**610**	**461**	**555**	**632**	**2,676**	**960**

Source: Vegetable Board of Israel, Annual Report 2003.

Table 22: Exports of Tomatoes Products, by Destination, January thru August 2002 and 2003, Tons (in Terms of Final Product), Percent

		EU	U.S.	U.K.	East Europe	Far East	Other	Total	% of Total Export
8/2002	Juice	284	8	93	0	0	21	406	**4.52**
	Concentrate	661	1,135	186	689	147	6	2,824	**31.47**
	Peeled	1,110	2,600	78	0	0	0	3,788	**42.21**
	Sauce	237	11	105	0	0	0	353	**3.93**
	Other	221	792	127	30	52	379	1,601	**17.87**
	Total	2,513	4,546	589	719	199	402	8,973	**100.0**
	% of Total Export	**28.00**	**50.66**	**6.56**	**8.01**	**2.21**	**4.56**	**100.0**	
8/2003	Juice	227	9	15	6	0	17	324	**4.24**
	Concentrate	507	1,140	71	662	160	3	2,543	**33.33**
	Peeled	1,243	1,669	38	32	0	0	2,982	**39.04**
	Sauce	18	0	35	0	0	0	218	**2.85**
	Other	243	738	114	0	107	370	1,572	**20.54**
	Total	2,453	3,556	273	700	267	390	7,639	**100.0**
	% of Total Export	**32.11**	**46.55**	**3.57**	**9.16**	**3.49**	**5.12**	**100.0**	

Source: Vegetable Board of Israel, Annual Report 2003.

[8] Average $ Per Ton.

Table 23: Import of Tomatoes Products, by Origin, Thousand $, Percent, CY

		EU	U.S.	Canada	Turkey	East Europe	Other	Total	% of Total Export
2002	Whole or in Pieces	39	0	0	31	21	0	91	**3.1**
	Juice	0	6	0	0	67	2	75	**2.5**
	Ketchup and other tomato sauces	382	2,105	102	56	114	19	2,778	**94.4**
	Total	421	2,111	102	87	202	21	**2,944**	**100.0**
	% of Total Export	**14.3**	**71.7**	**3.5**	**2.9**	**6.9**	**0.7**	**100.0**	
2001	Whole or in Pieces	156	143	0	20	43	133	495	**13.3**
	Juice	2	5	0	0	67	3	77	**2.1**
	Ketchup and other tomato sauces	165	2,690	151	41	96	4	3,147	**84.6**
	Total	323	2,838	151	61	206	140	**3,719**	**100.0**
	% of Total Export	**8.7**	**76.3**	**4.1**	**1.6**	**5.5**	**3.8**	**100.0**	
2000	Whole or in Pieces	7	112	0	27	27	13	186	**6.1**
	Juice	0	2	0	0	47	3	52	**1.7**
	Ketchup and other tomato sauces	104	2,505	88	0	79	6	2,782	**92.2**
	Total	111	2,619	88	27	153	22	**3,020**	**100.0**
	% of Total Export	**3.7**	**86.7**	**2.9**	**0.9**	**5.1**	**0.7**	**100.0**	

PSD Table Israel Tom. Paste,28-30% TSS Basis							
	2002	Revised	2003	Estimate	2004	Forecast	UOM
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	
Market Year Begin		07/2002		07/2003		07/2004	MM/YYYY
Deliv. To Processors	165445	160000	165000	171000	0	240000	(MT)
Beginning Stocks	4185	4185	2200	2200	650	550	(MT, Net Weight)
Production	17370	17370	19950	18000	0	22650	(MT, Net Weight)
Imports	500	500	500	500	0	100	(MT, Net Weight)
TOTAL SUPPLY	22055	22055	22650	20700	650	23300	(MT, Net Weight)
Exports	6360	6360	7500	6150	0	6800	(MT, Net Weight)
Domestic Consumption	13495	13495	14500	14000	0	14200	(MT, Net Weight)
Ending Stocks	2200	2200	650	550	0	2300	(MT, Net Weight)
TOTAL DISTRIBUTION	22055	22055	22650	20700	0	23300	(MT, Net Weight)

PSD Table Israel Tomato Sauce							
	2002	Revised	2003	Estimate	2004	Forecast	UOM
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	
Market Year Begin		07/2002		07/2003		07/2004	MM/YYYY
Deliv. To Processors	165445	160000	190000	171000	0	240000	(MT)
Beginning Stocks	1274	548	238	143	138	100	(MT, Net Weight)
Production	4964	5595	6500	6157	0	7800	(MT, Net Weight)
Imports	1500	3000	1500	1600	0	900	(MT, Net Weight)
TOTAL SUPPLY	7738	9143	8238	7900	138	8800	(MT, Net Weight)
Exports	1000	2000	1200	700	0	1000	(MT, Net Weight)
Domestic Consumption	6500	7000	6900	7100	0	7457	(MT, Net Weight)
Ending Stocks	238	143	138	100	0	343	(MT, Net Weight)
TOTAL DISTRIBUTION	7738	9143	8238	7900	0	8800	(MT, Net Weight)

PSD Table Israel Canned Tomatoes							
	2002	Revised	2003	Estimate	2004	Forecast	UOM
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	
Market Year Begin		07/2002		07/2003		07/2004	MM/YYYY
Deliv. To Processors	165445	160000	190000	171000	0	240000	(MT)
Beginning Stocks	2510	2011	1813	626	2613	766	(MT, Net Weight)
Production	16060	13365	18500	15390	0	19030	(MT, Net Weight)
Imports	0	250	0	150	0	20	(MT, Net Weight)
TOTAL SUPPLY	18570	15626	20313	16166	2613	19816	(MT, Net Weight)
Exports	8105	7500	8700	7400	0	9500	(MT, Net Weight)
Domestic Consumption	8652	7500	9000	8000	0	8200	(MT, Net Weight)
Ending Stocks	1813	626	2613	766	0	2116	(MT, Net Weight)
TOTAL DISTRIBUTION	18570	15626	20313	16166	0	19816	(MT, Net Weight)